# PERFORMANCE WORK STATEMENT: COMPLIANCE WITH SERVICE BULLETINS (CFM56-2 72-517, 72-546 & 72-561)

#### 1.0 INTRODUCTION

The National Aeronautics and Space Administration (NASA) Dryden Flight Research Center (DFRC) has operated a DC-8-72 as a flying science laboratory since 1987. This aircraft is based at DFRC's Aircraft Operations Facility (DAOF) in Palmdale, California.

NASA has a requirement for a one-time compliance with CFM56-2 service bulletins on the DC-8 flying laboratory's four engines and one spare in accordance with the following:

- 1.1 Service Bulletin CFM56-2 72-517 Ultrasonic inspection of high-speed compressor stage 1 blades for corner number 3 cracks.
- 1.2 Service Bulletin CFM56-2 72-546 Ultrasonic inspection of high-speed compressor stage 1 blades for dovetail pressure face cracks.
- 1.3 Service Bulletin CFM56-2 72-561 High-pressure turbine rotor disk inspection.

CFM 56 engines are manufactured by CFM International, a company owned jointly by SNECMA of France, and General Electric of the United States. These service bulletin inspections are required to assure continued airworthiness of these aircraft components. Contact CFM International, Technical Publications Department, 1 Neumann Way, Cincinnati, OH 45215; telephone (513) 552-2800; fax (513) 552-2816, for copies of the service bulletins.

This aircraft is a unique national resource whose use for scientific research worldwide is scheduled several years in advance. The Government's schedule for this maintenance is very critical, and it is essential that the work be completed on time to avoid impacting scheduled scientific missions. Engine inspection activity shall be performed at the DFRC DAOF facility in Palmdale, California during the period starting January 15, 2010 through February 26, 2010.

# 2.0 OBJECTIVE AND SCOPE

Perform the inspections as described in CFM56-2 service bulletins CFM56-2 72-517, CFM56-2 72-546 & CFM56-2 72-561 on the four (4) CFM56-2-C1 engines installed on the DC-8-72 and one spare engine. Submit any "over and above" repairs descriptions and estimated costs to the government. This contract shall include any and all labor and materials necessary to complete all inspections.

## 3.0 SCHEDULE

The Contractor shall propose a schedule for completion of the required inspections within the period of January 15, 2010 to February 26, 2010.

## 4.0 TASK REQUIREMENTS

Contractor shall furnish all management, supervision, labor, material, expendable supplies, technical manuals, support equipment, and tooling necessary to accomplish the inspections.

#### 5.0 QUALITY ASSURANCE

The Contractor shall provide and maintain a quality assurance and inspection program. The Contractor's inspection program shall ensure compliance with technical guidance, engineering specifications, and applicable Federal Aviation Administration (FAA) regulations.

- 5.1 <u>Non-conformance</u>: The Contractor shall have in place a procedure for reporting of nonconforming articles, materials, and equipment. ("Non-conformance" is defined as a condition of any article, material, or service in which one or more characteristics do not conform to the specified requirements. This includes failures, discrepancies, deficiencies, defects, anomalies, and malfunctions).
- 5.2 <u>Inspection:</u> The Contractor shall provide aircraft inspectors to verify that work is performed in accordance with technical specifications and that the workmanship is airworthy. The inspectors shall ensure that all inspection/repair documentation is completed and delivered to the government.
- 5.3 <u>Tool Control:</u> The Government requires the Contractor to utilize a system of positive tool control. A system must be established by the Contractor to account for all tools used on the engine inspections. The offer shall submit a tool control plan with their proposal.
- 5.4 <u>Government Source Inspection:</u> All work performed on this contract shall be subject to inspection by the Government at any time. Government designated inspectors will provide follow up inspections to work performed on the aircraft.
- 5.5 <u>Documentation:</u> Documentation and records of all contractor performed inspections/repairs shall be delivered along with the completed inspection/repair documentation to include certification of airworthiness.

#### 6.0 OTHER REQUIREMENTS

- 6.1 <u>GOVERNMENT-FURNISHED ITEMS:</u> The Government will be providing the following:
  - Hangar facility and appropriate work space
  - Compressed air source
  - All hazardous material (HAZMAT) disposal
- 6.2 <u>NASA ACCESS DURING MAINTENANCE</u>: The Contractor shall permit NASA Technical staff to have access to the aircraft during engine inspections.

## 7.0 MILESTONE GUIDELINES

Completion is required by February 26, 2010. Performance is considered timely if services are completed by February 26, 2010. Performance exceeds expectation if services are completed *before* the established performance period (as proposed by the Contractor), no later than 42 days after award date. Contractor fails to meet the milestone if services are completed after the established performance period.